

Claims

1. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising

-means for isolating LDL from a serum or plasma sample for the preparation of a LDL

5 fraction, and

-means for separating the lipids from the LDL fraction to obtain a lipid fraction.

2. The kit according to claim 1, wherein the means for isolating the LDL from the serum or plasma sample is a buffered heparin solution.

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3. The kit according to claim 1, wherein the means for separating the lipid is a chloroform-methanol solution.

4. The kit according to claim 1, further comprising a means for use in the determination of the baseline level of conjugated dienes (LDL-BDC) in the lipid fraction.

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5. The kit according to claim 4, wherein the means for use in the determination of LDL-BDC in the lipid fraction is an organic solvent.

6. The kit according to claim 4, wherein the means for use in the determination of LDL-BDC in the lipid fraction is cyclohexane.

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7. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising

25 means for isolating LDL from a serum or plasma sample for the preparation of a LDL fraction, and

means for use in the determination of the antioxidant potential of LDL (LDL-TRAP) in the LDL fraction.

is a buffered heparin solution.

9. The kit according to claim 7, wherein the means for use in the determination of the antioxidant potential of LDL in a serum or plasma sample is 2,2'-azobis(2-amidinopropane)HCl (ABAP).

5 10. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising
means for isolating LDL from a serum or plasma sample for the preparation of a LDL fraction,

means for separating the lipids from the LDL fraction to obtain a lipid fraction,

10 means for use in the determination of LDL-BDC in the lipid fraction, and

means for use in the determination of LDL-TRAP in the LDL fraction.

11. The kit according to claim 10, wherein the means for isolating the LDL from the serum or plasma sample is a buffered heparin solution.

12. The kit according to claim 10, wherein the means for separating the lipid is a chloroform-methanol solution.

13. The kit according to claim 10, wherein the means for use in the determination of LDL-BDC in the lipid fraction is an organic solvent.

14. The kit according to claim 13, wherein the means for use in the determination of LDL-BDC in the lipid fraction is a cyclohexane.

15. The kit according to claim 10, wherein the means for use in the determination of the antioxidant potential of LDL is the sample is 2,2'-azobis(2-amidinopropane)HCl (ABAP).

16. A kit for use in quantifying oxidation parameters of lipids in a LDL fraction of blood

containing a solvent which extracts lipids from a LDL fraction; and

a second container containing an amount of resuspension solvent sufficient to resuspend the extracted lipids.

17. The kit according to claim 16, wherein the solvent which extracts lipids is
5 chloroform:methanol having a ratio greater than about 2:1.

18. The kit according to claim 17, wherein the resuspension solvent in the second container is neutral or inert to spectrophotometric analysis.

10 19. The kit according to claim 18, wherein the resuspension solvent in the second container is cyclohexane.

20. A kit for use in determining antioxidant potential of a LDL fraction of blood serum or plasma, comprising

15 a first container for extracting lipids from the LDL fraction, the first container containing a solvent which extracts lipids from a LDL fraction; and

a second container containing an amount of a compound which produces peroxy radicals sufficient to induces lipid peroxidation of the LDL fraction.

20 21. The kit according to claim 20, wherein the compound in the second container is 2,2' - azobis(2-amidinopropane)HCl (ABAP).

22. The kit of claim 21, wherein the ABAP is a powder and further comprising a third container containing a solution for suspension of the ABAP.

25 23. The kit of claim 21, further comprising a third container containing a compound which enhances luminescence.

25. A kit for isolation of LDL from a blood or serum sample, comprising
a container containing a buffered heparin solution, and

instructions for adding a sufficient quantity of the buffered heparin solution to the blood or serum sample to form a LDL precipitate, mixing the mixture gently, and centrifuging the resulting mixture for at least 20 minutes to recover the LDL precipitate.